

# HUMAN GENOME SCIENCES LEGAL DEPARTMENT

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## FAX COVER SHEET

DATE:

November 27, 2000

Total Number Of Pages: 3

TO:

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FAX NO.:

703-308-0294

PHONE NO.: 1-703-308-0196

FROM:

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Atty. Docket. No.:

PF201 (U.S. Patent No. 6,030,804, Appl. No. 08/468,011)

#### COMMENTS:

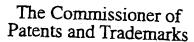
Per your request, please find attached the "ribboned" and "front" pages of the issued patent for U.S. Appl. Serial No. 08/468,011.

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Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

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## United States Patent

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Toda I John

Commissioner of Patents and Trademarks

Melveria Hary

### US006030804A

United States Patent [19] Soppet et al.

[11] Patent Number:

6,030,804

Date of Patent:

\*Feb. 29, 2000

#### [54] POLYNUCLEOTIDES ENCODING G-PROTEIN PARATHYROID HORMONE RECEPTOR HLTDG74 POLYPEPTIDES

[75] Inventors: Damiel R. Soppet. Centreville. Va.; Yi Li. Gaithersburg. Md.: Craig A. Rosen. Laytonsville, Md.; Steven M. Ruben. Olney, Md.

[73] Assignee: Human Genome Sciences, Inc. Rockville, Md.

[\*] Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

[21] Appl. No.: 08/468,011

[22] Filed: Jun. 6, 1995

[51] Int CL7 .... C12N 15/12: C07K 14/705 [52] . U.S. CI. ... 435/69.1; 435/252.3; 435/254.11; 435/325; 435/320.1; 536/23.5; 536/24.31

[58] Field of Search 536/23.5, 24.31: 435/69.1, 325, 252.3, 254.11, 320.1

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**PUBLICATIONS** 

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ABSTRACT

Human G-protein parathyroid hormone (PTH) receptor polypeptides and DNA (RNA) encoding such polypeptides and a procedure for producing such polypeptides by recombinant techniques is disclosed. Also disclosed are methods for utilizing such polypeptides for identifying antagonists and agonists to such polypeptides and methods of using the agonists and antagonists therapeutically to treat conditions related to the underexpression and overexpression of the PTH receptor receptor polypeptides. Also disclosed are diagnostic methods for detecting a mutation in the PTH receptor receptor nucleic acid sequences and detecting a level of the soluble form of the receptors in a sample derived

26 Claims, 10 Drawing Sheets